AQA

ASSESSMENT and
QUALIFICATIONS
ALLIANCE

General Certificate of Education

Psychology 5181
Specification A

Unit 2 (PYA2R) Physiological Psychology
and Individual Differences

Mark Scheme
2008 examination - June series

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

UNIT 2 (PYA2)
QUALITY OF WRITTEN COMMUNICATION (QoWC)

2 marks	The work is characterised by some or all of the following: • clear expression of ideas • good range of specialist terms • few errors in grammar, punctuation and spelling • errors do not detract from the clarity of the material.
1 mark	The work is characterised by: • reasonable expression of ideas • use of some specialist terms • errors of grammar, punctuation and spelling • errors detract from the clarity of the material.
0 marks	The work is characterised by: • poor expression of ideas • limited use of specialist terms • errors and poor grammar, punctuation and spelling • errors obscure the clarity of the material.

ASSESSMENT OBJECTIVES ONE AND TWO

AO1	Assessment Objective One = knowledge and understanding of psychological theories, terminology, concepts, studies and methods and communication of knowledge and understanding of psychology in a clear and effective manner.
AO2	Assessment Objective Two = analysis and evaluation of psychological theories, concepts, studies and methods and communication of knowledge and understanding of psychology in a clear and effective manner.

SECTION A: PHYSIOLOGICAL PSYCHOLOGY

1 (a) Outline **one** method of managing the negative effects of stress.

(6 marks)

Marking Criteria	Marks	Performance Descriptions
Candidates may classify methods in a number of different ways. The specification refers to generic methods: either physiological or psychological methods. Alternatively, at a similarly high level of generality, methods can be classified as **problem-focused** (changing the event or situation that produces the stress); or **emotion-focused**: (changing one's response to stress).	6	**Accurate and reasonably detailed** The candidate provides an accurate and reasonably detailed outline description of one method of managing the negative effects of stress that demonstrates relevant knowledge. For example, there is an account of the use of drugs in reasonable detail (type of drugs used/outline of mode of action). Alternatively, there might be a number of different examples of the generic physiological method in less detail.
Of the **psychological** methods of dealing with stress, stress inoculation training (SIT) is a form of cognitive restructuring (Meichenbaum). It is usually described as having 3 stages (conceptualisation, skill acquisition/rehearsal and application/follow-through. Hardiness training (Kobasa) is a means teaching people to cope better with stress situations and can also be described as having 3 stages: focusing, reconstruction and compensation. (Note that simply describing the hardy personality is not creditworthy.) Credit can be given to descriptions of more 'informal' approaches such as social support, provided the account is psychologically informed and not anecdotal.	5-4	**Less detailed but generally accurate** The candidate provides a less detailed but generally accurate outline description of one method of managing the negative effects of stress that demonstrates relevant knowledge. For example, the candidate offers an account of the stages in SIT in reasonable detail, or a number of different examples of a generic physiological method in basic detail.
Physiological approaches typically include psychotherapeutic drugs (eg benzodiazepines), biofeedback and various forms of relaxation techniques.	3-2	**Basic** The candidate provides a basic outline description of one method of managing the negative effects of stress that demonstrates some relevant knowledge but lacks detail and may be muddled. For example, hardiness training as a basic approach is identifiable and accurate, but with little detail on the actual process of hardiness training.
No evaluation is required but when given this can sometimes add to the description. More detail should be expected if candidates choose one of these, rather than a generic method. In the latter case, detail will necessarily be at the expense of breadth.	1-0	**Very brief/flawed or inappropriate** The candidate provides a very brief/flawed or inappropriate description. It may fail to demonstrate any knowledge or understanding of the topic.

1 (b) Describe the findings and conclusions of **one** study into the effects of stress on the immune system. *(6 marks)*

Marking Criteria	Marks	Performance Descriptions
There is both direct and indirect evidence from studies to support the conclusion that exposure to stress can affect the immune system. Cohen et al (1993) investigated the role of general life stress on vulnerability to the common cold virus. Many studies have focused on secretory immunoglobulin A (sigA), not least because it can be easily measured in saliva. A number of theories have been proposed to explain the link: eg excessive production of corticosteroids interferes with the creation of antibodies.	**6**	**Accurate and reasonably detailed** The candidate provides an accurate and reasonably detailed description of the findings and conclusions of one study into the effects of stress on the immune system that demonstrates relevant knowledge. For example, the candidate provides a detailed account of both conclusions and findings (though not necessarily balanced).
Studies have shown that the immune system is not affected in the same way by all stressors. Only chronic stressors (eg bereavement, marital disharmony, serious problems at work, etc) tend to result in impaired functioning of the immune system. Both Kiecolt-Glaser et al (1995) & Sweeney (1995) have found, for example, that caring for a relative with Alzheimer's disease affected the progress of wound healing in patients. Acute stressors do not have the same effect. Indeed, the evidence is that they can increase the number of natural killer cells as well as the levels of sigA. (Evans et al 1994; Jemmott & Magloire, 1988.)	**5-4**	**Less detailed but generally accurate** The candidate provides a less detailed but generally accurate description of the findings and conclusions of one study into the effects of stress on the immune system that demonstrates relevant knowledge. For example, the candidate provides a detailed account of findings, with only a brief mention of conclusions, or a balanced account of both in less detail. *Note: if only findings or conclusions are given, maximum mark is 4*
Other evidence suggests that susceptibility to virus infections such as influenza can be increased by the effects of stress on the production of immunoglobulin A (eg Stone et al 1987).	**3-2**	**Basic** The candidate provides a basic description of the findings and conclusions of one study into the effects of stress on the immune system that demonstrates some relevant knowledge, but lacks detail and may be muddled. For example, only a brief account of either findings or conclusions is given, or a very brief account of both.
Brady's study is **not** relevant to this question as it did not focus on the immune system. Studies on personality are primarily into CVD and are therefore also not relevant. However, studies on life events could gain some credit if the argument is made that stress could have caused ill-health through the effect on the immune system. In this type of question, findings generally refer to the actual results of studies (though not necessarily as detailed as actual percentages).	**1-0**	**Very brief/flawed or inappropriate** The candidate provides a very brief/flawed or inappropriate description. It may fail to demonstrate any knowledge or understanding of the topic.

1 (c) Outline and evaluate research in relation to the workplace as a source of stress.

(18 marks)

Marking Criteria

AO1 credit should be given for outline descriptions of relevant studies into the workplace as a source of stress. It is also acceptable to give accounts of what the effects *are* and how they are *mediated*, since this would demonstrate knowledge of the findings of research and/or relevant theory.

AO2 credit should be given for analysis and evaluation of relevant research, including criticisms of the methodology of studies.

There is an extensive literature into the causes of workplace stress. A number of stressful job factors have been identified:

- Work overload/pressure (eg Breslow & Bell, 1960; Cobb, 1976; Sokejima & Kagamimori, 1998)

- Job insecurity

- Role conflict and role ambiguity

- Poor interpersonal relationships (eg Cooper & Marshall, 1976; French, 1974)

- Lack of control over work (eg Marmot et al, 1997)

- Shift work

The combined effect of many of these factors is illustrated by Frankenhaeuser (1975). In jobs that were very dull and repetitive, where workers had little control over the pace of their work, where decisions had to be made very quickly, the environment was noisy, and where social contact was minimal, it was found that these workers had abnormally high levels of stress hormones.

Note that discussion of environmental factors such as noise and crowding must be linked to the workplace.

Particular occupations are known to be associated with higher stress levels than others, so a study that has shown this, including some of the above examples, is acceptable. In view of the question wording, research focused on the consequences of the job stress, or on ways of dealing with job stress, are also acceptable

Candidates may attempt to introduce research using non-human animals, but such studies must be made relevant to the world of work to gain credit (for example, it might be said that Brady was primarily interested in the effects of stress in business executives). Similarly, answers that focus on the effects of stress on health (CVD, immune system, etc) must explicitly demonstrate a connection with workplace stress to gain credit. However, some aspects of life-change research could be relevant.

1 (c)

Marks	Performance Descriptions
	AO1: Outline of research in relation to the workplace as a source of stress.
6	**Accurate and reasonably detailed**
	The candidate provides an accurate and reasonably detailed description of research in relation to the workplace as a source of stress that demonstrates relevant knowledge. For example, there is an account of one research study/theory in detail, or a number of research studies in less detail.
5-4	**Less detailed but generally accurate**
	The candidate provides a less detailed but generally accurate description of research in relation to the workplace as a source of stress that demonstrates relevant knowledge. For example, there is an account of one research study/theory in reasonable detail, or a number of research studies in basic detail.
3-2	**Basic**
	The candidate provides a basic description of research in relation to the workplace as a source of stress that demonstrates some relevant knowledge but lacks detail and may be muddled. For example, one or more research studies/theories are identifiable, but with little detail.
1-0	**Very brief/flawed or inappropriate**
	The candidate provides a very brief/flawed or inappropriate description. It may fail to demonstrate any knowledge or understanding of research in relation to the workplace as a source of stress.

Marks	Performance Descriptions
	AO2: Evaluation of research in relation to the workplace as a source of stress.
12-10	**Informed commentary**
	• Within the time constraints for this part of the question, there is effective use of material to address the question and provide an informed commentary. • Effective analysis and evaluation of material. • Broad range of issues and/or evidence in reasonable depth, or a narrower range in greater depth. • The structure is generally clear and coherent.
9-7	**Reasonable commentary**
	• There is appropriate selection of material to address the question, but this is not always used effectively to produce a reasonable commentary. • Reasonable analysis and evaluation of material. • A range of issues and/or evidence in limited depth, or a narrower range in greater depth.
6-4	**Basic commentary**
	• The selection and use of material provides only a basic commentary. • Basic analysis and evaluation of material. • Superficial consideration of a restricted range of issues and/or evidence.
3-0	**Rudimentary/absent or irrelevant commentary**
	• The selection and use of material provides only a rudimentary commentary, or commentary is absent or wholly irrelevant. • Analysis and evaluation absent or just discernible.

2 (a) Describe the General Adaptation Syndrome.   (6 marks)

Marking Criteria	Marks	Performance Descriptions
This response, which was first identified by Selye (1936), comprises three stages: alarm reaction, resistance and exhaustion. • During the initial alarm stage, perceived threats to the organism make the hypothalamus produce the corticotrophic-releasing hormone, which in turn stimulates the pituitary gland's production of adrenocorticotrophic hormone. Via the bloodstream, this then acts on the adrenal cortex, which produces corticosteroids. Simultaneously, the hypothalamus also activates the sympathetic branch of the ANS to stimulate the production of adrenaline and noradrenaline from the adrenal medulla. As a result of these two parallel processes, the body is activated in many ways and is prepared for fight or flight. • During the resistance stage, the body's resources are fully mobilised to cope with the stressor. Activity from the SAM* decreases but this is balanced by an increase in activity of the HPAA**. • If stressors persist and cannot be overcome, the resistance of the individual sooner or later gives way to exhaustion. The physiological consequences include effects on the adrenal glands, which are enlarged but depleted, and an endocrine system that is generally thrown into disarray. Ultimately, Selye argued that all body tissues and processes can be affected and, in extreme cases, become diseased.	6	**Accurate and reasonably detailed** The candidate provides an accurate and reasonably detailed description of the General Adaptation Syndrome that demonstrates relevant knowledge. For example, there is an account of the 3 stages of the GAS with detail of each stage.
	5-4	**Less detailed but generally accurate** The candidate provides a less detailed but generally accurate description/explanation of the General Adaptation Syndrome that demonstrates relevant knowledge. For example, the 3 stages are identified but not all are fully elaborated.
	3-2	**Basic** The candidate provides a basic description/explanation of the General Adaptation Syndrome that demonstrates some relevant knowledge, but lacks detail and may be muddled. For example, the 3 stages are identified, but only briefly described. Naming the 3 stages in the correct order = 2 marks.
	1-0	**Very brief/flawed or inappropriate** The candidate provides a very brief/flawed or inappropriate description. It may fail to demonstrate any knowledge or understanding of the topic.

* SAM = Sympathetic–adrenomedullary axis
** HPAA – Hypothalamic–pituitary-adrenal axis

2 (b) Explain **one** strength and **one** weakness of a method of stress management.

(*3 + 3 marks*)

Marks	Performance Descriptions
3	**Accurate and reasonably detailed** The candidate provides an accurate and reasonably detailed explanation of strength/weakness of a method of stress management that demonstrates relevant knowledge. For example, the candidate provides a detailed explanation of the effectiveness of drug therapy (strength).
2	**Less detailed but generally accurate** The candidate provides a less detailed but generally accurate explanation of strength/weakness of a method of stress management that demonstrates relevant knowledge. For example, the candidate explains how hardiness training might not work with some individuals without specifying what type of individuals these might be.
1	**Basic** The candidate provides a basic explanation of strength/weakness of a method of stress management that demonstrates relevant knowledge. This might be where the strength/weakness is identified but not elaborated.
0	**Very brief/flawed or inappropriate** The candidate provides a flawed or inappropriate description. It may fail to demonstrate any knowledge or understanding of a strength/weakness.

Marking Criteria

The method of stress management needs to be clearly *identifiable* from the answer, otherwise no marks can be awarded. There are no marks available for naming or describing the method.

Some relevant methods are listed in Q 1 (a).

Strengths are most likely to focus on effectiveness (for example, drugs can provide fairly quick relief, or hardiness training once developed can be effective in a wide range of situations or be an enduring strategy). **Weaknesses** could be the side effects of drugs or, in the case of psychological methods, the greater amount of commitment in terms of time and effort. Some considerations might seem relatively trivial or obvious (cost, time, etc) but are creditworthy if accurate and reasonably well described.

For this question, it is sufficient to *explain* the strength and the weakness. They do not need to be evaluated (ie how much of a problem it is). However, if candidates do this, they may be credited in so far as it demonstrates greater understanding of the issue.

Although most candidates will probably use the same method, it is possible for the weakness and the strength to apply to different methods as long as both methods are identifiable.

2 (c) "Some individuals cope better than others with stressful situations."

Discuss research into the role played by personality in modifying the effects of stressors.

(18 marks)

Marking Criteria
AO1 is a description of research (theories or studies) into personality as a modifier of the stress response. Credit should also be given for explanation of how the effects are mediated, provided this is based on research.
AO2 is an evaluation of this research. This might involve criticisms of studies/theories, assessments of practical significance, comparisons and contrasts between explanations, etc.

Kobassa has identified **'hardy'** individuals, who she describes as those whose cognitive strategies are better suited to dealing with stress. For example, they are more able to identify the symptoms of stress (so avoiding action can be taken in time). They make more realistic assessment of stressors, including being aware of the positive aspects of stressful situations (opportunities and new challenges).

The concept of hardiness has linked to the idea of control and, critics would say, it is somewhat difficult to distinguish the two. Thus it is known that there are important individual differences in **locus of control** (Rotter, 1966). Hardy people are more likely to have an internal locus of control. While this question is not directly on stress management, it would be legitimate to consider such methods in so far as they offer support or otherwise to the underlying theory. Thus, Kobassa suggests that hardiness can be improved with appropriate training. There is little direct research evidence on the effectiveness of hardiness training and what research there is, has tended to be confined to white middle-class managers, so may be difficult to generalise to women and cultural groups.

Candidates may introduce *gender* as an aspect of personality. However, the two areas are differentiated in the specification, and unless gender is explicitly justified as an aspect of personality such answers cannot receive credit. This would also apply to any other material candidates may introduce, eg cultural differences.

Friedman and Rosenmans' pioneering work first distinguished so-called **Type A and Type B personalities.** It was claimed that the former appears to be much more affected by stress than the latter. However, early studies indicating that Type A personalities have a higher risk of developing CHD have not been supported by later research. To make sense of sometimes contradictory findings, it has been suggested that a critical factor is hostility. There is evidence that when this is combined with Type A personality, correlations with CHD are higher. Individuals who repress rather than express their hostility may be particularly vulnerable. Temeshok (1987) describes such individuals in terms of a Type C personality.

Another personality trait which it is claimed is associated with responses to stress is **sensation seeking** (Zuckerman, 1979). High sensation seekers actively seek out activities that other people would find acutely stressful. The extent to which a person measures high or low in sensation seeking has been found to correlate with that of their partner in intimate relationships (Lesnick-Oberstein & Cohen, 1984). Zuckerman also suggest that high and low sensation seekers also tend to seek out the 'right' occupation, preferring high-pressure or more routine jobs respectively.

2 (c)

Marks	Performance Descriptions	Marks	Performance Descriptions
	AO1: Outline of research into the role played by personality in modifying the effects of stressors		**AO2:** Evaluation of research into the role played by personality in modifying the effects of stressors
6	**Accurate and reasonably detailed** The candidate provides an accurate and reasonably detailed description of research into the role played by personality in modifying the effects of stressors that demonstrates relevant knowledge. For example, there is an account of one research study/theory in detail, or a number of research studies in less detail.	12-10	**Informed commentary** • Within the time constraints for this part of the question, there is effective use of material to address the question and provide an informed commentary. • Effective analysis and evaluation of material. • Broad range of issues and/or evidence in reasonable depth, or a narrower range in greater depth. • The structure is generally clear and coherent.
5-4	**Less detailed but generally accurate** The candidate provides a less detailed but generally accurate description into the role played by personality in modifying the effects of stressors that demonstrates relevant knowledge. For example, there is an account of one research study/theory in reasonable detail, or a number of research studies in basic detail.	9-7	**Reasonable commentary** • There is appropriate selection of material to address the question, but this is not always used effectively to produce a reasonable commentary. • Reasonable analysis and evaluation of material. • A range of issues and/or evidence in limited depth, or a narrower range in greater depth.
3-2	**Basic** The candidate provides a basic description of research into the role played by personality in modifying the effects of stressors that demonstrates some relevant knowledge but lacks detail and may be muddled. For example, one or more research studies/theories are identifiable, but with little detail.	6-4	**Basic commentary** • The selection and use of material provides only a basic commentary. • Basic analysis and evaluation of material. • Superficial consideration of a restricted range of issues and/or evidence.
1-0	**Very brief/flawed or inappropriate** The candidate provides a very brief/flawed or inappropriate description. It may fail to demonstrate any knowledge or understanding of the topic.	3-0	**Rudimentary/absent or irrelevant commentary** • The selection and use of material provides only a rudimentary commentary, or commentary is absent or wholly irrelevant. Analysis and evaluation absent or just discernible.

SECTION B: INDIVIDUAL DIFFERENCES

3 (a) Outline **one or more** assumptions of the biological (medical) model in relation to the causes of abnormality.

(6 marks)

Marks	Performance Descriptions
6	**Accurate and reasonably detailed** The candidate provides an accurate and reasonably detailed outline of one or more assumptions of the biological model in relation to causes of abnormality that demonstrates knowledge and understanding. For example, the candidate accurately explains a number of assumptions of the model (though not necessarily balanced), or one of those in more detail.
5-4	**Less detailed but generally accurate** The candidate provides a less detailed but generally accurate outline of one or more assumptions of the biological model in relation to causes of abnormality that demonstrates knowledge and understanding. For example, the candidate provides an account of one assumption in less detail.
3-2	**Basic** The candidate provides a basic outline of one or more assumptions of the biological model in relation to causes of abnormality that demonstrates some knowledge and/or understanding but lacks detail and may be muddled. For example, only a brief account of one assumption, or merely listing a number of assumptions without explanation.
1-0	**Very brief/flawed or inappropriate** The candidate provides a very brief/flawed or inappropriate outline. It may fail to demonstrate any knowledge or understanding of the topic.

Marking Criteria

The basic assumption of the medical model is that mental illnesses resemble physical illnesses, have more or less clear-cut symptoms and can therefore be diagnosed and treated in a similar way. Just as physical illnesses are caused by trauma, infection, genetic factors, biochemical imbalances or other changes to the nervous system, it is assumed that this is also true of mental illnesses. Because the medical model assumes that mental disorders arise from such physical causes, it is therefore a biological model.

Some answers may be quite specific about causal mechanisms, for example in the case of schizophrenia. This is acceptable, providing underlying assumptions (eg role of genetics) are clear from the account. Similarly, examples of biological explanations of specific disorders may be given (eg eating disorders). These can be credited to the extent to which they illustrate specific assumptions. However, this may be difficult if the candidate has not identified the assumption(s) in the first place.

While related to, and frequently deriving from, assumptions about causality, assumptions about **treatments** are not asked for. Therefore, statements such as "The focus of treatment is on modifying neurochemical processes through the use of drugs" cannot be credited. However, if the treatments are explicitly related to causes in some way (eg "The assumption of the model is biological causation, therefore there is a bias towards invasive/somatic treatments"), then this is creditworthy.

3 (b) Outline **one** psychological explanation of anorexia nervosa.   *(6 marks)*

Marking Criteria	Marks	Performance Descriptions
Psychological explanations include: • Behaviourist (ie conditioning)/SLT • Cognitive • Psychodynamic The explanation chosen could be generic (eg behaviourist), in which case a brief outline of the main factors (conditioning and modelling) would be appropriate. Alternatively, it could refer to a specific mechanism (eg the influence of media). In this case, rather more detail would be required, particularly on the role of modelling. Many explanations are common to both anorexia and bulimia. However, if the explanation is clearly referring to bulimia (eg an explanation of the binge eating/purging) then this is not acceptable. Evaluation is not necessary. However, citing research findings could be creditworthy if it amplified the description of the explanation. Stating the clinical characteristics of AN would not constitute an explanation, nor would descriptions of case studies.	**6**	**Accurate and reasonably detailed** The candidate provides an accurate and reasonably detailed outline of a psychological explanation of anorexia nervosa that demonstrates relevant knowledge and understanding. For example, there is an account of the SLT explanation (modelling, role of media, etc) in detail, or a generic one such as learning/behaviourist in less detail.
	5-4	**Less detailed but generally accurate** The candidate provides a less detailed but generally accurate outline of an explanation of anorexia nervosa that demonstrates relevant knowledge and understanding. For example, there is an account of the role of the media but without reference to actual social learning processes (imitation/modelling).
	3-2	**Basic** The candidate provides a basic outline of an explanation of anorexia nervosa that demonstrates some relevant knowledge and/or understanding but lacks detail and may be muddled. For example, the candidate provides a brief account of the role of abuse in childhood.
	1-0	**Very brief/flawed or inappropriate** The candidate provides a very brief/flawed or inappropriate description. It may fail to demonstrate any knowledge or understanding of an explanation of anorexia.

3 (c) Outline **two or more** definitions of abnormality and consider limitations of these definitions.

(18 marks)

Marking Criteria
AO1 for this question is an outline description of two or more definitions of abnormality. **AO2** is an analysis and evaluation of these, in terms of their limitations as definitions of abnormality. This could also include a generic discussion of the problems of defining abnormality. The concept of abnormality is very imprecise and difficult to define. Examples of abnormality can take many different forms and involve different features, so that what at first sight seem quite reasonable definitions turn out to be quite problematical. Perhaps the least satisfactory definition of abnormality from a psychological point of view is in terms of a **deviation from social norms** – well illustrated by changing perspectives on homosexuality. Another criteria that has generally failed the test of time is **deviation from statistical norms**. One of the main problems with the idea of defining abnormality as statistical infrequency, deviation from ideal mental health or deviation from social norms is the fact that none of these criteria copes well with cultural variations – what is considered perfectly acceptable (or very common) behaviour in one culture may be seen as abnormal in another. Defining abnormality as **the deviation from the ideal mental health** (as the quotation implies) has similar problems in explaining cross-cultural variations. Johoda (1958) identified a number of characteristics (individual choice, resistance to stress, an accurate perception of reality, and self actualisation) that people should possess in order to be considered normal. Despite some intuitive appeal, it is generally considered an unsatisfactory definition.	The main problem is probably that such ideals are so demanding that almost everyone would be considered to some degree. Lists of ideals of defining mental health are essentially value judgements that are both context and era-dependent. A more promising approach to defining abnormality recognises that a number of criteria might contribute towards abnormality – the so-called **failure to function adequately** definition. Rosenham & Seligman (1989) offered one list of such criteria. For them, abnormality was identified when it could be seen to involve the following: • Suffering • Maladaptiveness • Vividness and unconventionality • Unpredictability and loss of control • Irrationality and incomprehensibility • Observer discomfort • Violation of moral and ideal standards It is suggested that the more of these features that are in evidence, the more likely is the behaviour to be defined as abnormal. However, this approach to defining abnormality has also been criticised. Firstly, it is suggested that it depends too heavily on subjective assessments, and secondly, it does not sufficiently differentiate abnormal behaviour from behaviour that is non-conformist, unconventional or just plain eccentric. The question asks for limitations but raising strengths could be a way of considering the limitations (AO2).

Marks	Performance Descriptions	Marks	Performance Descriptions
	AO1: Outline of two or more definitions of abnormality		**AO2:** Limitations of definition
6	**Accurate and reasonably detailed** The candidate provides an accurate and reasonably detailed outline of two or more definitions of abnormality that demonstrates knowledge and understanding. For example, there is an account of two definitions in detail, or a number of definitions in less detail.	**12-10**	**Informed commentary** • Within the time constraints for this part of the question, there is effective use of material to address the question and provide an informed commentary. • Effective analysis and evaluation of material. • Broad range of issues and/or evidence in reasonable depth, or a narrower range in greater depth. • The structure is generally clear and coherent.
5-4	**Less detailed but generally accurate** The candidate provides a less detailed but generally accurate outline of two or more definitions of abnormality that demonstrates knowledge and understanding. For example, there is an account of two definitions in reasonable detail or a number in basic detail. *If only one definition is outline, this is accurate and reasonably detailed (max 4 marks)*	**9-7**	**Reasonable commentary** • There is appropriate selection of material to address the question, but this is not always used effectively to produce a reasonable commentary. • Reasonable analysis and evaluation of material. • A range of issues and/or evidence in limited depth, or a narrower range in greater depth. *If only one definition is considered and this is reasonable: max 8 marks.*
3-2	**Basic** The candidate provides a basic outline of two or more definitions of abnormality that demonstrates knowledge and understanding but lacks detail and may be muddled. For example, at least two definitions are identifiable but with little detail. *If only one definition is outlined, this is less detailed but generally accurate (max 2 marks)*	**6-4**	**Basic commentary** • The selection and use of material provides only a basic commentary. • Basic analysis and evaluation of material. • Superficial consideration of a restricted range of issues and/or evidence. *If only one definition is considered and this is basic: max 5 marks.*
1-0	**Very brief/flawed or inappropriate** The candidate provides a very brief/flawed or inappropriate description. It may fail to demonstrate any knowledge or understanding of the topic.	**3-0**	**Rudimentary/absent or irrelevant commentary** • The selection and use of material provides only a rudimentary commentary, or commentary is absent or wholly irrelevant. • Analysis and evaluation absent or just discernible.

15

4 (a) Outline **one** definition of abnormality. Explain **one** limitation of this definition of abnormality.

(3 marks +3 marks)

Marking Criteria	Marks	Performance Descriptions
Definitions of abnormality listed in the specification are: • **Deviation from social norms** (ie behaviour expected by society) • **Deviation from statistical norms** (ie behaviour which is uncommon or rare) • **Deviation from the ideal mental health** (Johoda, 1958, identified a number of characteristics that people should possess in order to be considered normal: individual choice, resistance to stress, an accurate perception of reality, and self-actualisation) • **Failure to function adequately** (Rosenham & Seligman, 1989, state that abnormality was identified when it could be seen to involve the following: suffering, maladaptiveness, vividness and unconventionality, unpredictability and loss of control, irrationality and incomprehensibility, observer discomfort, violation of moral and ideal standards). All definitions are unsatisfactory in one way or another – often for reasons that involve failing to accommodate cultural differences.	3 2 1 0	**Accurate and reasonably detailed** The candidate provides an accurate and reasonably detailed explanation/limitation of one definition of abnormality that demonstrates relevant knowledge. For example, the candidate provides an account of the deviation from ideal mental health as given in the marking criteria opposite. **Less detailed but generally accurate** The candidate provides a less detailed but generally accurate **explanation/limitation of one definition of abnormality** that demonstrates relevant knowledge. For example, the candidate identifies some of the failure to function characteristics, or does not elaborate the social norms definition by means of an appropriate example. **Basic** The candidate provides a basic explanation/limitation of one definition of abnormality that demonstrates relevant knowledge. For example, the definition is merely named or the limitation identified ("doesn't take account of culture"). **Very brief/flawed or inappropriate** The candidate provides a flawed or inappropriate description. It may fail to demonstrate any knowledge or understanding of the definition/limitation.

4 (b) Outline **one or more** assumptions of the cognitive model in relation to the causes of abnormality.   *(6 marks)*

Marking Criteria	Marks	Performance Descriptions
The basic assumption of the cognitive approach holds that mental events cause behaviour in that we interpret our environment before we react to it. In the case of abnormal behaviour, it is the interpretations and disordered cognitions that lead to the behaviour. Emotional problems can be attributed to distortions in our cognitions or thinking processes. These distortions are typically in the form of overgeneralisations, irrational beliefs, illogical errors or negative thoughts.	6	**Accurate and reasonably detailed** The candidate provides an accurate and reasonably detailed explanation of one or more assumptions of the cognitive model in relation to causes of abnormality that demonstrates knowledge and understanding. For example, the candidate accurately explains a number of assumptions of the model, or one of these (eg distorted cognitions) in more detail.
Some answers may be quite specific about causal mechanisms, for example in the case of attribution and depression. This is acceptable, providing underlying assumptions (eg role of cognitions) are clear from the account. Similarly, examples of cognitive explanations of specific disorders may be given (eg eating disorders). These can be credited to the extent to which they illustrate specific assumptions. However, this may be difficult if the candidate had not identified the assumptions in the first place. While related to, and frequently deriving from, assumptions about causality, assumptions about treatments are not asked for. Therefore, statements such as "The focus of treatment is on understanding the disordered thoughts and working with the patient to change these" cannot be credited. However, they could be if they are explicitly related to causes in some way (eg implying non-biological causation).	5-4	**Less detailed but generally accurate** The candidate provides a less detailed but generally accurate explanation of one or more assumptions of the cognitive model in relation to causes of abnormality that demonstrates knowledge and understanding. For example, the candidate provides an account of the faulty thinking assumption but this is not elaborated (eg by appropriate examples).
	3-2	**Basic** The candidate provides a basic explanation of one or more assumptions of the cognitive model in relation to causes of abnormality that demonstrates some knowledge and/or understanding but lacks detail and may be muddled. For example, there is only a brief account of one assumption (faulty thinking), or merely lists a number of assumptions without explanation.
	1-0	**Very brief/flawed or inappropriate** The candidate provides a very brief/flawed or inappropriate description. It may fail to demonstrate any knowledge or understanding of the cognitive model.

4 (c) Outline and evaluate biological explanations of anorexia nervosa **and/or** bulimia nervosa.

(18 marks)

Marking Criteria

AO1 credit should be given for an outline of the biological explanation of eating disorder(s), including the assumptions on which the explanation is based.

AO2 credit should be given for evaluation of this explanation using research studies, consideration of the degree of support for the involvement of biological factors, examination of the role of other factors (ie psychological), comparison with other explanations. Describing a study in support of a biological causation would also be appropriate AO2. However, an answer focused on one or two 'key' studies could be limited, in view of the restricted range of evidence considered.

While it may be necessary, in the interests of clarity, to identify the eating disorder(s) being discussed, description of symptoms is **not** required and therefore cannot be credited.

Because eating behaviour is related to homeostatic mechanisms, theories of eating disorders in terms of **neurological factors** are very popular. For example, it has been suggested that the hypothalamus may be dysfunctional in people with eating disorders as this is the regulatory centre for eating behaviour. Most of the support for this idea came from non-human animal studies. Studies have shown correlations between anorexia and changes in noradrenaline and serotonin levels in the brain, while other studies have implicated various hormones and endorphins in bulimia. Another influential theory states that people with bulimia have a heightened physiological need for carbohydrates, hence the preference for this type of food during binges.

Because eating disorders run in families, there have been suggestions that they may have a **genetic basis**. Evidence for these is usually provided by concordance studies, particularly with twins.

However, all twin studies have criticisms. For one thing, it could be argued that MZ twins have a more similar environment than DZ twins (eg they are often dressed and treated the same way). This could account for their greater similarity in terms of vulnerability to disorders like AN. Also twin studies are based on very small samples – only 25 MZ and 20 DZ twins. This can make it difficult to generalise from the results.

Kendler et al (1993) have conducted a similar twin study on BN. However, in this study the concordance rate for MZ twins was lower (23%).

Studies into psychological mechanisms (eg Field, Fearn) would all be relevant to discuss the limitations of biological explanations.

4 (c)

Marks	Performance Descriptions	Marks	Performance Descriptions
	AO1: Outline of **biological** explanation(s) of eating disorder(s).		**AO2:** Evaluation of **biological** explanations of eating disorder(s)
6	**Accurate and reasonably detailed** The candidate provides an accurate and reasonably detailed outline description of biological explanation(s) of eating disorder(s) that demonstrates knowledge and understanding. For example, the candidate presents an overview of the genetic and hormonal explanations of anorexia and/or bulimia, or one of these in detail.	12-10	**Informed commentary** Within the time constraints for this part of the question, there is effective use of material to address the question and provide an informed commentary. Effective analysis and evaluation of material. Broad range of issues and/or evidence in reasonable depth, or a narrower range in greater depth. The structure is generally clear and coherent.
5-4	**Less detailed but generally accurate** The candidate provides a less detailed, but generally accurate, outline description of the biological explanation of eating disorder(s) that demonstrates knowledge and/or understanding. For example, only the hormonal explanation may be outlined, but there is reasonable detail on the mechanisms involved.	9-7	**Reasonable commentary** There is appropriate selection of material to address the question, but this is not always used effectively to produce a reasonable commentary. Reasonable analysis and evaluation of material. A range of issues and/or evidence in limited depth, or a narrower range in greater depth.
3-2	**Basic** The candidate provides a basic outline description of the biological explanation of eating disorder(s) that demonstrates knowledge and/or understanding. For example, a basic account of the genetic explanation may be given, but there is little or no detail on mechanisms.	6-4	**Basic commentary** The selection and use of material provides only a basic commentary. Basic analysis and evaluation of material. Superficial consideration of a restricted range of issues and/or evidence.
1-0	**Very brief/flawed or inappropriate** The candidate provides a very brief/flawed or inappropriate description. It may fail to demonstrate any knowledge or understanding of a biological explanation.	3-0	**Rudimentary/absent or irrelevant commentary** The selection and use of material provides only a rudimentary commentary, or commentary is absent or wholly irrelevant. Analysis and evaluation just discernible.

Assessment Grid

Question	Part	AO1	AO2	Total
1	(a)	6		6
	(b)	6		6
	(c)	6	12	18
Total for Q.1		**18**	**12**	**30**
2	(a)	6		6
	(b)	6		6
	(c)	6	12	18
Total for Q.2		**18**	**12**	**30**
3	(a)	6		6
	(b)	6		6
	(c)	6	12	18
Total for Q.3		**18**	**12**	**30**
4	(a)	6		6
	(b)	6		6
	(c)	6	12	18
Total for Q.4		**18**	**12**	**30**
QoWC		2		2
Total for unit		**38**	**24**	**62**
% weighting AS		20.4	12.9	
% weighting A2		10.2	6.5	